6MN8

High-Mu Triple Triode

Duoducar Type
For Matrix-Amplifier Applications
in Color-TV Receivers

ELECTRICAL CHARACTERISTICS - Bogey Values

Heater Voltage (ac or dc)	E_h		6.3		V
Heater Current	I_h		0.9		A
Direct Interelectrode Capacitances:[a]		*Unit No.1*	*Unit No.2*	*Unit No.3*	
Grid to plate	C_{gp}	2.6	2.6	2.6	pF
Input: G to (K, H)	C_{in}	4.6	4.6	4.6	pF
Output: P to (K, H)	C_{out}	0.33	0.57	0.65	pF

For the following characteristics, see Conditions below: Values are for each unit.

Amplification Factor	μ	47	40	
Plate Resistance (Approx.) . . .	r_p	6250	10,000	Ω
Transconductance	G_m	7500	4000	µmho
Plate Current	I_b	11	4.8	mA
Grid Voltage (Approx.) for I_b = 50µA		-5	-11	V
Conditions:				
Heater Voltage	E_h	6.3	6.3	V
Plate Voltage	E_b	125	200	V
Grid Voltage	E_c	-1	-4	V

MECHANICAL CHARACTERISTICS

Maximum Overall Length . . . . 2.875 in (73.02 mm)
Maximum Seated Length . . . . 2.50 in (63.5 mm)
Maximum Diameter . . . . 1.188 in (30.1 mm)
Dimensional Outline . . . . JEDEC E9-60
See *Outlines, Glass Tubes* in *General Section*
Envelope T9
Base . . . . . . Small-Button Duodecar 12-Pin with Exhaust Tip (JEDEC No.E12-70)
Terminal Diagram . . . . JEDEC 12HU
Type of Cathode . . . . Coated Unipotential
Operating Position . . . . Any

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MAXIMUM RATINGS – Design-Maximum Values[b]

Values are for Each Unit

Plate Voltage	E_{bb}	330	V
Grid Voltage:			
Positive-bias value	E_{cc}	0	V
Plate Dissipation	P_b	3	W
Heater-cathode voltage (Each unit):			
Peak	e_{hkm}	±200	V
Average[c]	$E_{hk(av)}$	100	V
Heater Voltage, ac or dc	E_h	5.7 to 6.9	V

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance:			
For fixed-bias operation	R_g	1	MΩ

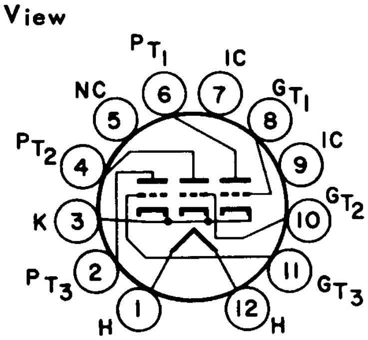
[a] Measured without external shield in accordance with the current issue of EIA Standard RS-191.

[b] As defined in the current issue of EIA Standard RS-239.

[c] Measured with a dc meter.

TERMINAL DIAGRAM – Bottom View

Pin 1 - Heater
Pin 2 - Plate of Unit No.3
Pin 3 - Cathode
Pin 4 - Plate of Unit No.2
Pin 5 - No Internal Connection
Pin 6 - Plate of Unit No.1
Pin 7 - Do Not Use
Pin 8 - Grid of Unit No.1
Pin 9 - Do Not Use
Pin 10 - Grid of Unit No.2
Pin 11 - Grid of Unit No.3
Pin 12 - Heater



JEDEC 12HU